

**FARMERS CENTRE  
Uganda Ltd.**

**EXTENSION TEACHING METHODS**  
for  
**Agronomy Practices  
Farming as a Business  
Output Marketing  
Post-harvest & Storage  
Linkages to Financial Institutions  
Group Savings**

**FACE Extension Facilitator (FEF)  
Extension Guide**

**What is Extension?  
Extension Teaching Methods  
    Individual Teaching (One-on-one)  
    Teaching Groups in the Field  
    Teaching Groups in a Meeting Room  
    Teaching the Masses  
    Selecting the Teaching Method  
Possible Future Teaching Methods  
Adult Learning Principles  
References**

**S. Kay Rockwell, PhD  
Extension Programming Specialist  
CNFA-UGANDA  
July 2010**

## EXTENSION – What is it?

**EXTENSION – Nonformal education** that links the education and research resources together. Extension links education and research in order to make scientific knowledge available to all who need it. The basic mission is to enable people to improve their lives and communities through learning partnerships that put knowledge to work.

**Nonformal education** uses specially designed educational activities in which adults have an opportunity to learn systematically under the guidance of an agency, teacher, or leader (i.e., FEF). It is adult education that takes place within different community setting.

(VISUAL 1): Farmers Centre

- a. Universities and researchers identify best farming practices
- b. Farmers Centre arranges training in agricultural practices for FEFs
- c. FEFs learn about many farming practices

**Adult Education** – A set of organized activities carried out by a wide variety of institutions to help mature men and women acquire new knowledge, understanding, skills, attitudes, interests, or values and apply them in their daily living.

(VISUAL 2): FEFs become teachers of adults

**FEF RESPONSIBILITIES FOR TEACHING ADULTS** – FEFs have four major responsibilities in teaching adults about best farming practices:

1. Provide new information (i.e., give knowledge) about farming methods:
  - Agronomy practices
  - Farming as a business
  - Post-harvest & Storage
  - Output marketing (VISUAL 3 & 4)
2. Link farmers together into Production Groups ... (VISUAL 5)
  - Communicate farmer needs back to Farmers Centre CEO
  - Train on group savings (VISUAL 6)
3. Link farmers to Financial Institutions (VISUAL 6)

**FEF Questions or Problems**

First contact your Community Project Coordinator

Might get referred to CEO or General Manager (VISUAL 7)

**EXTENSION IDENTIFICATION** – It is an honor to be part of FACE Extension.

(VISUAL 8): Ways FEFs can identify themselves with Extension include:

- a. Posters in villages (VISUAL 9)
- b. Badge or button (i.e., FEF with Farmers Centre)
- c. T-shirt with Farmers Center logo
- e. Sign-post at farm/home
- d. Sign-post at a field demo site

**NOTE:** In the future, possible ways to consider for identifying yourself with Extension are: (a) logos on pencils or pens, (b) caps with Extension logo, (c) notebooks with Extension logo, (d) bags with Extension logo, etc.

# EXTENSION TEACHING METHODS

## **Teaching Individuals (One-on-One contact)**

One-on-one contact is direct personal contact between FEFs and the farmer who wants information or assistance. (VISUAL 10)

### **FACE Extension Facilitator (FEF) home/office visit**

FEFs teach other farmers by being a “MODEL FARMER”. Other farmers can visit the FEFs home/field and see the best farming methods for sorghum, soybeans, and sunflowers. (VISUAL 11)

**Peer teaching** with hands-on activities – Match-ups between men or women so those using a best farming practice can teach it to another person through hands-on activities. The person-to-person contact also allows men or women to exchange experiences about using recommended practices.

**Mentoring** – people with expertise in certain fields meet regularly with the learner and supervise the implementation of best farming practices.

Mentoring helps farmers apply and adopt the practice in their situation.

(VISUAL 12)

**Best Practice Demo in the Field** – The FEF shows the farmer new farming practices using hands-on techniques.

(VISUAL 13)

**Results Demo** (or research demo) – Under the direct supervision of an expert or the FEF, a farmer sets up an experimental situation to illustrate the difference between new and traditional farming methods. For example, an experiment can be set up to illustrate different brands of seeds, or different fertilizers, or pesticides that are sprayed vs. the non-sprayed. All three farming methods must be placed in the same field site so environmental conditions are the same for each farming method. Cost/benefit records need to be kept to illustrate the effect of using each method. Research demonstrations show the advantage of a recommended practice or combination of practices.

(VISUAL 14)

## **Teaching Groups in the Field**

One-on-one teaching methods are the most effective. However, they take a lot of time. Therefore, teaching can take place “in groups” to better use the time the amount of time FEFs can devote to teaching.

(VISUAL 15)

**Best Practice Demo in the Field** – The FEF shows a group of neighboring farmers best farming practices using hands-on techniques. Set up a date and time for the field demo and notify farmers several days in advance. Encourage farmers to come to your farm rather than expecting you to visit them and work with them on a one-on-one basis. Involve contact farmers in the demonstration process and watch for person with similar interests to organize special interest groups later.

HINT 1: Consider setting the date with complementary activities such as at a time when seeds are available for distribution.

HINT 2: Consider holding a series of “Best Practice Demos” throughout the growing and harvesting season to show farmers the best practices at different stages of the growth cycle.

(VISUAL 16)

**Research Demo** (or results demo) – After collecting the cost/benefit information about the efficiency of the different methods illustrated in the results demo, hold a meeting to discuss the results. Provide farmers information about each method:

- basic cost
- labor requirements
- pertinent information such as comparative statistics on the use of (a) no fertilizer, (b) Fertilizer #1, and (c) fertilizer #2
- amount of products or produce from each farming practice, and/or quality of product
- amount of monetary gain from each farming practice

Research demonstrations help farmers decide which farming method is best for them.

They can also be included as a stop for an organized tour.

(VISUAL 17)

**Tours** – A series of field visits, usually on complementary topics. A group of farmers usually travel to different farm sites via bus. Farmers or other resource people may demonstrate best farming practices, provide information about the processes used, and/or describe the results of a “research demo.” Allow time for Qs & As.

NOTE: Arranging for a tour is time intensive, requires organizational skills, and requires financial resources.

(VISUAL 18)

## **Teaching Groups in a Meeting Room**

A very common way to teach is by bringing groups together in a meeting room.  
(VISUAL 19)

**Workshop** – A series of meetings on different parts of one topic. Usually the workshop leader presents lectures in which he/she uses posters or other illustrations. Demonstrations followed by practice exercises are a very effective method to include in workshops.

**Meeting room** workshops are usually arranged at a regular time and date of the week or month (i.e., from 11:00 – 1:00 every Tuesday for five weeks). The meetings may be held in a home, a public meeting room, or any other appropriate site.

**Field** workshops are held in the field and must be timely to coincide with the stage of production being illustrated.

(VISUAL 20)

**Best Practice Demo in the Meeting Room** is a hands-on demonstration designed to illustrate a proper technique or procedure. Presenters actually conduct each step in front of the audience; follow each step with Qs & As.

NOTE: Meeting room demos require extensive pre-planning to gather necessary equipment, products, and prepared materials. For example, illustrating post-harvest processes requires the following steps:

1. Prior to the demo, arrange all materials on or around a table.
2. First, illustrate bringing in the grain from the field
3. Second, describe and illustrate the cleaning process. Set this equipment and seed to the side.
4. Third, use grain that has been previously cleaned and describe and illustrate the drying process. Set the equipment and seed to the side.
5. Fourth, use seeds that have been cleaned and dried to discuss and illustrate the packaging methods.
6. Lastly, describe pertinent information about ways to use, market, or sell the product.

(VISUAL 21)

**Lecture/presentation** provides a large amount of information (knowledge) in a limited amount of time. Follow it with Qs & As. Use posters, visuals, and hands-on demonstrations as much as possible to enhance the learning process.

**Resource person** (subject matter expert) – invite a recognized expert for a lecture/presentation. Follow with Qs & As.

(VISUAL 22)

**Panel** should stimulate the audience to think about a topic. Invite several...

...experts to discuss related topics

...experts to present differing viewpoints on one topic

...farmers to share their knowledge, opinions, feelings, and experiences about a specific topic (i.e., a farming practice)  
Follow with Qs & As. Encourage the use of posters and visuals as much as possible.  
(VISUAL 23)

**Debate** should provide the pros and cons of using a given practice. The FEF selects one farmer to argue for a given practice and another farmer to argue against the given practice. Follow with Qs & As.  
(VISUAL 24)

## **Teaching the Masses**

The goal is to reach all farmers by teaching the masses, even those who are not members of a Producer Group.  
(VISUAL 25)

**Radio** can disseminate information to the largest number of people in the shortest time. Radio programs can respond to questions from farmers who call into the radio station via phone. Also use the radio to tell farmers about...

- ...production practices
- ...market conditions
- ...Extension activities
- ...meetings
- ...tours & field days
- ...etc. (VISUAL 26)

**Exhibits** show farmers about Extension work and what it accomplishes.

**Posters** use drawings, pictures, and words to describe Extension activities. Post the poster in a public location.

**Displays** combine posters and farm objects (i.e., equipment, seeds, harvested products, etc.) to illustrate a concept. Set up a display at the Farmers Centre, NGO offices, workshops, tours, field days, shows, health clinics, etc.

(VISUAL 27)

## **Selecting the Teaching Methods**

When planning how to share expertise with others, several questions to consider are:

1. What educational activities/learning experiences are most appropriate for the audience and content?
2. Will the program delivery methods selected teach what you want to teach?
3. What is the most logical sequence of learning activities and/or methods?
4. Do the learning activities build logically on other learning experiences?
5. What routine or ongoing activities and events can be used to enhance this program? Examples include posters, radio programs, meetings, FEF training, etc.

(Adapted from Seevers, et al., p. 107)

## **Possible Future Teaching Methods**

**Mobile telephones** will become a way for community members to contact the FEF for specific information.

**Newspaper articles** can inform farmers about Extension activities or describe recommended farming practices.

**Newsletters** are similar to a newspaper but are written by Extension Leaders about issues in their area. They are given to farmers who sign up to receive them. Newsletters can be used to...

- ...provide timely information on different topics
- ...announce meetings, workshops, shows, field days, etc.
- ...describe model farming or community projects in the area
- ...answer questions of general interest

**Publications (or bulletins)** are developed by experts in the field. They come in a variety of shapes, forms, and designs. Usually they will cover a number of topics related to one general topic.

**Flyers** can come in a variety of shapes, forms, and designs. Flyers may be a 1-page folded handout on a given topic. They can be used to advertise...

- ...Extension activities such as tours, field days, workshops, etc.,
- ...Special interest activities

**Farming guides** can come in a variety of shapes, forms, and designs. They usually address a single farming or nutritional best management practice. They might be written specifically for a district or group of districts. They can be kept at one central location and given to clients upon request.

**Shows** are a way to gather people together...

- ...display farm products, posters, displays, and demonstrations
- ...have competitions for the best products, posters, displays, and demonstrations
- ...award prizes for the best products, posters, displays, and demonstrations

There is no example at the present time – Shows can be expensive to set up and may not be practical at the present time. However, District shows might be something to consider in the future.

**Videotapes in a meeting room**

**Computer programs (maybe DVD's)**

**Internet programs**

**Television programs**

## **Adult Learning Principles**

Principle 1 – Learning is change. The most common result of adult learning is probably a change in knowledge. However, learning is an individual process and will vary widely among those you teach.

Strategies to use: Review and repeat concepts as necessary.

Principle 2 – Adults must want to learn. Learning efficiency and achievement is directly related to the person's motivation to learn.

Strategies to use: Plan programs that....

...closely address the needs and interests of the participants.

...include activities to help the adult develop a 'felt need' for the information.

Principle 3 – Adults learn by doing activities that match their 'entry level' for learning. They learn best by direct participation in the learning process.

Strategies to use: Plan learning activities at the participants' capability level to guarantee immediate learning success. Then use more challenging learning activities.

Principle 4 – Learning should focus on realistic learning problems. And, participants will have prior knowledge and experience to draw from.

Strategies to use include...

...ask 2 or 3 participants to share experiences related to the topic OR use group brainstorming to identify 'entry level' for learning

...use these experiences to explain the principle, concept, or technique of your topic

...focus on knowledge and skills that will have immediate application

Principle 5 – Prior experience with the topic, as well as prior experience in learning situations can have either positive or negative effects on learning. Positive experiences enhance the learning; negative experiences have an inhibiting effect.

Strategies to use include...

...working cautiously until individual 'entry level' situations are identified

...use positive reinforcement early in the learning process

...tactfully help people unlearn incorrect concepts and relearn the correct concept

Principle 6 – Adults learn best in informal environments. Strict rules during formal schooling as a child can create mental barriers and inhibit an adult from becoming fully immersed in the educational process.

Strategies to use include...

...keep the number and scope of rules to a minimum. If possible, allow the group to set their own operating rules.

...schedule refreshment breaks if the learning session is more than 2 hours long.

The break provides an opportunity for participants to interact with each other as well as with the instructor.



Principle 7 – Use variety in teaching adults. Both children and adults learn through their senses (i.e., seeing, hearing, feeling, tasting, etc.). Retention rate is greatly enhanced when a variety of instruction methods and strategies are used. Therefore, one needs to balance participatory and lecture type teaching methods to maximize educational effectiveness while still responding to the need to be efficient in the educational process

Principle 8 – Adults want guidance, not grades. They appreciate affirmation of their progress but self-evaluation of their progress in meeting their needs is the most relevant.

Strategies to use include...

...give positive reinforcement throughout the learning experience

...provide an opportunity for self-evaluation at different levels of the learning experience

(Adapted from Birkenholz, pp. 31-39)

### Selected references for **Adult Teaching**

*Effective Adult Learning* by Birkenholz, R. J. (1999). Interstate Publishers, Inc. 510 North Vermilion Street, P.O. Box 50, Danville, IL 61834-0050 USA. E-mail: [info-ipp@IPPINC.com](mailto:info-ipp@IPPINC.com) Web: [www.IPPINC.com](http://www.IPPINC.com) ISBN 0-8134-3160-3

- Chapter 4 – Adult Learning Principles, pp. 31-38
- Appendix B: 30 things we know about adult learning, pp. 161-163
- Chapter 13 – Selecting Adult Educators, pp. 133-141

*Education through Cooperative Extension* by Seevers, B., Graham, D., Gamon, J., & Conklin, N. (1997). Delmar Publishers at [www.delmar.com](http://www.delmar.com) ISBN 0-8273-7172-1  
Chapter 6: ‘The concept of education’ and ‘The nature of adult education’, pp. 121-124.

*Planning Programs for Adult Learners: A Practical Guide for Educators, Trainers, and Staff Developers* by Caffarella, R. S. (1994). Jossey-Bass Inc. 350 Sansome Street, San Francisco, California 94104 USA. ISBN 0-7879-0033-8  
Chapter 13: Coordinating Facilities and On-Site Events, pp. 209-228.

### Selected references for **Extension Delivery Methods and Educational Strategies**

*Effective Adult Learning* by Birkenholz, R. J. (1999). Interstate Publishers, Inc. 510 North Vermilion Street, P.O. Box 50, Danville, IL 61834-0050 USA. E-mail: [info-ipp@IPPINC.com](mailto:info-ipp@IPPINC.com) Web: [www.IPPINC.com](http://www.IPPINC.com) ISBN 0-8134-3160-3

- Chapter 5 – Adult Teaching Methods, pp. 43-56.

*Education through Cooperative Extension* by Seevers, B., Graham, D., Gamon, J., & Conklin, N. (1997). Delmar Publishers at [www.delmar.com](http://www.delmar.com) ISBN 0-8273-7172-1

- Chapter 7 – Extension Teaching Methods, pp. 139-164.
- Chapter 5 – ‘Program design and implementation’, pp. 106-108.

Uganda National Farmer Association (1999). *Farm Management Certificate Course, Curriculum Blue Level*. 2<sup>nd</sup> ed. ISBN 9970-428-14-1

- ‘Methodology’, pp. 7-9.